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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/523,228

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Mario J Nappa

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7590

07/06/2006

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EXAMINER

HAILEY, PATRICIA L

ART UNIT

PAPER NUMBER

1755

DATE MAILED: 07/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/523,228

Applicant(s)

NAPPA ET AL.

Examiner

Patricia L. Hailey

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/27/05

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

*Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. *Claims 4-10 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.*

Claims 4-10 are indefinite for lacking positive recitation of process steps, conditions, or parameters defining the processes claimed therein. For example, the term "using" in claim 4 does not clearly define the claimed process; such a term alludes to any of a variety of process steps (e.g., contacting the hydrocarbon or halohydrocarbon with the catalyst of claim 1).

It is respectfully suggested that claims 4-10 be amended to recite the processes claimed therein in a format such as set forth in the cited references of record. See, for example, claims 1-8 of U. S. Patent No. 5,494,873.

Claim 14 is indefinite for lacking antecedent basis for the phrase "more than three moles of ammonium nitrate per mole of chromium". While claim 12 recites limitations of "at least three moles of nitrate" and "at least three moles of ammonium", it cannot be determined whether the limitations of claim 14 are to further define either of these limitations. Additionally, claim 14 lacks antecedent basis for the limitation "ammonium nitrate"; in claim 12, the limitation "ammonium hydroxide" is recited.

### *Double Patenting*

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. *Claims 1-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14 of copending Application No. 10/523,226.*

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the instant application are directed to an alpha-chromium oxide in which some of the chromium atoms are replaced by trivalent cobalt atoms, whereas the claims in the copending application are directed to an alpha-

chromium oxide in which some of the chromium atoms are optionally replaced by trivalent cobalt atoms. Thus the subject matter of the '228 application overlaps that of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***5. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Bruhnke et al. (U. S. Patent No. 5,177,273).***

Bruhnke et al. teach a catalyst consisting essentially of chromium oxide, which is combined with a refractory oxide, fluorinated and/or modified with, for example, cobalt. The catalyst may be used in the production of halohydrocarbons via reaction of reactants such as propane, propylene, and halogenated acyclic three-carbon hydrocarbons with at least a stoichiometric amount of chlorine and hydrogen fluoride (HF) in the vapor phase in the presence of said catalyst. See col. 1, line 34 to col. 2, line 32 of Bruhnke et al.

In view of these teachings, Bruhnke et al. anticipate claims 1-6.

*Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. *Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuji et al. (U. S. Patent No. 5,494,873).*

Tsuji et al. teach a method for producing a chromium-based fluorination catalyst, in which chromium hydroxide is prepared by precipitation of a chromium salt (e.g., nitrate) with an alkali (e.g., ammonia), followed by firing in the presence of H<sub>2</sub>, or of an inert gas; the final product is expected to approach a compound represented by the compositional formula Cr<sub>2</sub>O<sub>7</sub>. See col. 3, line 66 to col. 4, line 39 of Tsuji et al.

At col. 5, lines 15-47, Tsuji et al. disclose that it is feasible to perform this process with chromium hydroxide and another metal, said metal being "in the form of metal hydroxides and/or salts" (col. 5, lines 20-22). Examples of the "another metal" include cobalt.

Tsuji et al. further state (col. 5, lines 33-40) :

"The addition of the above element can be easily achieved by a method in which a salt of the intended element is added to aqueous Cr salt solution in a predetermined amount during preparing a chromium hydroxide by the precipitation process, by a method in which a chromium hydroxide is impregnated with an aqueous solution of a salt of the intended element,..."

From this, one of ordinary skill in the art would reasonably expect to employ cobalt salts such as cobalt nitrates (or any divalent cobalt salt) to obtain a desired "cobalt-substituted chromium oxide".

Although Tsuji et al. do not disclose the "amounts of nitrate" per mole of chromium in the solution, it would have been obvious to one of ordinary skill in the art at the time the invention was made to determine through routine experimentation the optimal amounts of components desired to obtain the claimed catalyst.

### *Allowable Subject Matter*

The indication of allowable subject matter is held in abeyance pending a response to this Office Action. The rejection of claims in a double patenting rejection, but not in a rejection under 35 USC 102 or 103, does not imply that those claims are automatically allowable.

### *Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

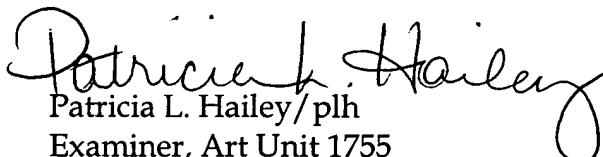
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Patricia L. Hailey/plh  
Examiner, Art Unit 1755  
June 25, 2006

**KARL GROUP  
PRIMARY EXAMINER  
GROUP**